

State of Illinois

Dept. & Div. ILL EPA-MRCP Inspector Gary L. Minter Date AUG 01 1985
 (Signature) MINE POLLUTION CONTROL PROGRAM
 Mine Name FIDELITY #11 Mine Company FREEMAN OPERATIONAL CO

IEPA M & M
 Permit No. IL0000302 Permit No. _____ County PERRY

General Location APPROXIMATELY 5 MILES WEST OF DUGUOINArrival Time 1130 AM Weather Conditions COOL CLOUDY WINDY

RECLAMATION TYPE (Check Appropriate Type)

Mine Includes Prime Land Yes/ NoSteep Slope Rule Applies Yes/ NoCoal Preparation Yes/ NoNot Applicable —Reason for Visit: ROUTINE

Persons Contacted:

GLEN HAMILTON - RECL. SUPERVISORBILL SMITH - PERMIT MGR

PARAMETER CHECKLIST

1. Availability of: A — permits B — Plans
2. Imminent Danger to Public Health and Safety —
3. Significant Imminent Environmental Harm —
4. Signs and Markers: A. mine entrance B. perimeter C. blasting D. topsoil E. perimeter observance 1. 100' zone 2. 300' zone F. permit area correlation G. not investigated H. not applicable
5. Disposal Spoil and Waste Material Outside Pit or Direct Cast Site: (A) gob disposal
 1. site capacity 2. covering 3. vegetation B. within permit area C. site approved
 D. slope of site E. steep slope rules F. valley fill or head of hollow fills:
 1. permit area 2. location near ridge top 3. fill design 4. fill construction
 5. steep slope rules 6. under drains 7. lateral drains 8. controlled placement
 9. engineer inspection (G) not investigated H. not applicable
6. Soil Handling: A. removal before other disturbance B. storage C. protection
 D. thickness E. root medium F. other overburden G. toxic material handling
 H. root medium satisfactory for top soil replacement (slope, thickness, texture)
 I. topsoil replaced J. grading current K. rills and gullies L. erosion control
 systems M. timely revegetation and mulching (N) not investigated O. not applicable
7. Prime Land: A. prime land determination B. soil horizon removal prior to other disturbance C. thickness removed D. approved horizon storage E. protection of stockpiles F. horizon replacement and thickness G. protection of replaced horizons
 H. grade (I) not investigated J. not applicable
8. General Water Quality and Hydrology: A. waterways (1) unaffected area drainage diverted (2) affected area drainage ditches and berms 3. system maintenance B. grading
 C. vegetation D. toxic material E. horizontal boreholes (F) sediment ponds: 1. size
 2. structure 3. spillway 4. clean out 5. over 20' high or over 20 acre feet storage
 (— yes/— no) 6. seepage 7. structural weakness 8. discharge structure 9. chemical
 treatment system 9. (a). permitted — yes/— no (b) discharge water quality H. buffer
 zone (100') observance I. zone markers (J) NPDES permits required — yes/— no
 K. water quality L. not investigated M. not applicable

☐ TEMPORARY REPORT☒ FINAL REPORT

Mine Name

FIDELITY # 11

9. Stream Channel or Other Water Diversion: A. temporary or permanent B. size adequacy C. stability D. gradient E. grade stability F. suspended solids G. sediment control H. channel design I. erosion control structures J. fish and wildlife protection K. vegetation L. removal of temporary structures M. structure removal procedures (N.) not investigated O. not applicable
10. Road Hydrology: A. culverts (B) ditches C. location choice D. grade E. stream closeness F. ditch relief drains G. outslope drains H. construction material toxic/ non-toxic I. maintenance J. railroad spur hydrology K. vegetation L. not investigated M. not applicable
11. Impoundment Structures: A. M.H.S.A. construction observance B. coal waste in structure C. freeboard D. stability E. seepage F. engineer inspection G. dam marker H. maintenance I. ditch and spillways J. changes in geometry of structure (K.) not investigated L. not applicable
12. Steep Slope Procedure: A. spoil on outslope B. debris C. highwall removal D. disturbance above highwall E. excess spoil F. instability of spoil and woody material G. not investigated H. not applicable
13. Preparation Facility (includes crushing and screening): (A) water circuit 1. open system 2. closed system 3. no water circuit (B) slurry impoundment (C) berm stability a.) seepage (b.) vegetative cover (c.) freeboard 2. acid producing potential C. not investigated D. not applicable
14. Domestic Wastewater Treatment Facilities: A. type of system 1. activated sludge package plant 2. lagoon - sandfilters 3. septic tank w/sand filters 4. other B. sand filter maintenance 1. weeds 2. raking 3. sand replacement C. chlorination D. certified operator (E) not investigated F. not applicable

LEGEND: ○ = parameter inspected: ∅ = comment or question on the parameter

NOTE: Items circled were considered during this investigation. If nothing under a major item was investigated, circle either "not investigated" or "not applicable". Violation means violation or apparent violation.

 NO VIOLATIONS FOUND

✓ SEE ATTACHMENT

Indicated Parameter

Comments or Action Taken

Check Column

No.	Vio- lation	Non-Vio- lation
GEN		✓
Comm		
8A2		✓
8F		✓
8G		✓
8J		✓
13B		✓
13B1		✓

ATTACHMENT

Freeman United Coal Company
Fidelity #11
May 23, 1985

GENERAL COMMENTS: During the investigation, I was accompanied by Glen Hamilton, Reclamation Supervisor, and we both observed where five used transformers were laying on the ground and two of which were tipped over on their sides. One of the transformers had leaked fluid so I obtained a sample of the contaminated ground where the fluid had spilled. I prepared the sample and shipped it to this Agency's Springfield Lab for analysis. It is this Agency's policy to assume that transformer fluids contain P.C.B.'s unless proven otherwise through sampling. The results of the sample I obtained indicated less than .5 parts per million P.C.B.'s. At this time, clean-up is not necessary.

Bill Smith, Permit Manager, asked if I've had the opportunity to review an application recently submitted by Freeman, regarding the continuation of refuse disposal in the present final cut pit. I told Mr. Smith that I did look at the application and from what I could ascertain, the Agency probably wouldn't have any problems in issuing a supplement permit for the refuse disposal area.

8A2: I observed the sites affected area drainage ditches along the eastern and southern portions of the site and it appears that the ditches transport all of the surface runoff water to the sediment pond on the southern section of the site (NPDES Discharge #005). The ditches do not appear to be well vegetated, but since they will be mined through in the near future may only need some straw bales to help reduce the sediment load in the pond.

8F: I observed the sites two NPDES permitted sedimentation ponds both of which were discharging during this visit. Discharge 002, located along the eastern section of the site, was discharging in excess of 200 gallons per minute and the water appeared very clear, therefore no sample was obtained.

8G: I obtained an effluent sample and prepared and shipped it to the Agency's Champaign Regional Office Lab for analysis. The results of the analyses are listed below:

Sample #2 - obtained from the channel spillway of the southern sedimentation pond (NPDES Discharge 005). The pond was discharging at approximately 200 gallons per minute and the water sample appeared clear.

Lab #B542767

Total Iron	0.1 mg/l	Susp. Solids	7 mg/l
Manganese	0.46 mg/l	pH	8.2
Chlorides	16.0 mg/l	Alkalinity	199 mg/l
Sulfates	1057 mg/l	Total Acidity	0
		ROE	1690 mg/l

8J: This site is permitted under NPDES Permit IL0000302. Note: All DMR's have been submitted in accordance with permit conditions.

13B: According to Mr. Smith, Freeman is going to propose another slurry impoundment to be located west of the present impoundment. This is necessary because the present impoundment is reaching capacity and does not have too much life expectancy at this point.

13B1: The outside slopes of the slurry impoundment appear to be well vegetated which provides some soil stability. It does not appear that any further sloughing has occurred for quite some time now.

Gary L. Minton

Gary L. Minton
Environmental Protection Specialist

GLM:br
7/30/85

cc: MPCP/Records Unit
IDMM

SAMPLE
#2

WATER QUALITY

WASTE TREATMENT WORKS EFFLUENT SAMPLING FORM
ENVIRONMENTAL PROTECTION AGENCY

ENT SAMPLING FORM

SAMPLE COLLECTED BY

FOR LABORATORY USE ONLY

GARY L MINTON

SAMPLING LOCATION:

FIDELITY #11

BASIN SUB-BASIN

Big Muddy / Muddy Creek

TRIBUTARY

Youngs Creek / UNNAMED TRIBUTARY

CARD COL.

1

1

CARD NO. 1

CARD COL.

1

2

CARD NO. 2

CARD COL.

1

3

CARD NO.

2-5 NCCA BASIN CODE

6-7 PLANT OR STATION NO

8-10 FIPS COUNTY CODE
(USE ONLY FOR PLANT)

11-17 R542767 LAB ID NO.

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18 T SAMPLE TYPE CODE
(SEE LIST BELOW)

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19-20 85 YEAR

ARSENIC 19-22

PLANKTON
(NO./ML) 19-23

21-22 05 MONTH

BARIUM 23-25

FLUORIDE 24-26

23-24 23 DAY

BORON 26-28

CHLORIDE 27-30

25-26 02 HOUR (NEAREST)

CADMIUM 29-32

SULFATE 31-34

27 P TIME OF DAY (A.P.N.)

CHROMIUM (HEX) 33-35

TOTAL SULFUR 35-38

28-30 WATER TEMPERATURE
(DEG. F.)

CHROMIUM (TRI) 36-38

OIL 39-42

31-33 FIELD D.O.

CHROMIUM 39-41

M.B.A.S. 43-46

PH (UNITS) 34-36

COPPER 42-45

CARBON CHLOROFORM
EXTRACT 47-50

TOTAL PHOSPHORUS 37-40

CYANIDE 46-49

TURBIDITY
(UNITS) 51-54

AVG BOD 41-44

IRON (T) 50-53

RESIDUE ON
EVAP 55-58

COD 45-48

IRON (DISSOLVED) 54-56

VOLATILE SUSP
SOLIDS 59-62

PHENOLS 49-52

LEAD 57-60

COLOR (UNITS) 63-65

53-59 FEC COL
(11 100ML)

MANGANESE 61-63

HARDNESS 66-68

AMMONIA N 60-63

MERCURY
(MICRO GML) 64-66

ALKALINITY 69-71

NITRATE +
NITRITE AS N 64-66

NICKEL 67-69

TOTAL ACIDITY 72-74

ORGANIC N 67-69

SELENIUM 70-72

FREE ACIDITY 75-77 To pH 8.2 B+O

TOTAL N 70-72

SILVER 73-76

OTHER TESTS REQUIRED

T.D.S.

ZINC 77-79

☐ YES (REFERENCE REVERSE SIDE)

E.C. 73-76

ALL RESULTS EXPRESSED AS MG/L EXCEPT
WHERE OTHERWISE STATED

☐ NO

TOTAL SUSP
SOLIDS 77-80

SAMPLE TYPE CODES

A = DOMESTIC WASTE ONLY
E = INDUSTRIAL WASTE ONLY
I = MIXED DOMESTIC & INDUSTRIAL WASTE
S = STREAM, LAKE, OR RECEIVING WATER
T = MINE DRAINAGE OR WASTE
X = OTHER OR TYPE UNKNOWN

SIGN BELOW FOR EFFLUENT SAMPLE

TRANSPORTED BY

G. Minton

RECEIVED BY

DATE REC'D

TIME REC'D

AM
PM

TRANSPORTED BY

RECEIVED BY

DATE REC'D

TIME REC'D

AM
PM

SAMPLE RECEIVED BY

DATE REC'D

TIME REC'D

DATE ANALYSES COMPLETED

DATE RESULTS FORWARDED

TOTAL TESTS REQUESTED

LAB SECTION

CHAMPAIGN

TESTS RUN

SUPERVISOR

ML
10

RF

Disch
005

MAY 31 1985

JUN 26 1985

16

1057

0.1

0.46

1690

199

0

Gage Height (or top of ice) or R.P. to W.S.:

Sampling Techniques: GRAB

Flow conditions (velocity etc.): 200 GPM

Identification Nos on pH and Sp. Cond. meters:

Weather Conditions: WARM PARTLY CLOUDY WINDY

Comments and unusual conditions (indicate severity): WATER SAMPLE CLEAR

Sample No. 00100
County PERRY
Reference City DO QUON
Address or location FREEMAN UNITED COAL COMP., FIDELITY #11

Collector GARY L. MINTON
Time Collected 2 PM
Date Collected 5/23/85

Physical Observations, Remarks:

Diagram of area sampled showing location of samples taken:

OILY SUBSTANCE ON GROUND
NEAR TIPPED-OVER TRANSFORMER
FIVE TRANSFORMERS IN ALL - APPEAR
TO BE OLDER VARIETY

RECEIVED
JUN 20 1985
MINE POLLUTION CONTROL PROGRAM
MARION, ILLINOIS

MPCP/MARION

Sample is:
☐ Benzbiter Composite
☒ Area of maximum impact
☐ Other

ANALYSIS REQUESTED FOR POLYCHLORINATED BIPHENYLS. RETURN REPORT AND RESULTS TO LABORATORY
FENSE UNIT. ATTENTION: JIM KELTY

info. sample submitted for analysis

PCBS < 0.5 mg/g (PPM)

Transported by: G. Minton
Received by: _____
Transported by: _____
Received by: _____

FOR LAB USE ONLY
Lab Number: D040695 Recd. by: C MC
Date sample recd: 6/11/85
Date Analysis completed: _____
Date results forwarded: 6/11/85
Total Tests requested: _____
Lab Section: spilled